Violence and Injury Prevention

List of Tables and Figures:

Injury

Injury is a major public health problem and a leading cause of death and disability in Utah and the U.S. Injury causes physical and emotional suffering and costs millions of dollars in medical care, lost income, and lost productivity.

Injury is the leading cause of death for Utah children and young adults 1-44 years of age. In 1998, injury caused the deaths of 1,222 people in Utah, resulted in 11,102 hospitalizations, and more than 180,000 emergency room visits.[3,4,5] These numbers do not include injuries that were treated in doctor's offices, clinics, work sites, schools or at home.

The mission of the Utah Department of Health's Violence and Injury Prevention Program (VIPP) is to reduce the incidence of fatal and non-fatal injuries among Utah residents. Activities to accomplish this mission are conducted within the following strategies:

- Conduct data collection and injury research
- Conduct education to increase awareness about injury causes and prevention
- Promote legislation and enforcement to reduce injury hazards and increase safe behaviors
- Collaborate with state and local community partners to plan and implement injury prevention activities
- Provide funding, training, and technical support to strengthen local health department injury prevention programs

> The risk of injury is so great that most persons sustain a significant injury at some time during their lives.[1] Nevertheless, this widespread human damage too often is taken for granted, in the erroneous belief that injuries happen by chance and are the result of unpreventable "accidents". In fact, many injuries are not "accidents," or random, uncontrollable acts of fate; rather, **most injuries are predictable and preventable**.[2]

VIPP works with many partners in identifying injury causes, setting priorities and conducting injury prevention activities. Active partners include other UDOH programs, state and local agencies, local health departments, businesses, non-profit community organizations, and health care providers.

The Violence and Injury Prevention Program conducts and/or provides significant support to the following projects and activities:

- ✓ Motor Vehicle Seat Belt Campaign
- ✓ Youth Suicide Study
- ✓ Suicide Prevention Task Force
- ✓ Child Fatality Review Committee
- ✓ Rape and Sexual Assault Prevention
- ✓ Intimate Partner Death Review Team
- ✓ Domestic Violence/Partner Abuse Prevention Project
- ✓ Traumatic Brain Injury Surveillance
- ✓ Adolescent Pedestrian Safety Project
- ✓ Utah Safe Kids Campaign

Unintentional Injury

The term "unintentional injury" has replaced the term "accidental injury" in most national and state public health and safety organizations. The term "accident" suggests a random act of fate and implies that an injury event could not be predicted or prevented. We have all heard the phrase "accidents just happen;" but that is not true. Most injury causes can be identified, understood and prevented.

Most injuries can be prevented by choosing safe behaviors, using safety equipment and obeying safety laws and regulations. Examples include "buckling up," using safety helmets, using crosswalks, installing smoke detectors, obeying speed limits, etc.

Utah's annual rate of unintentional injury deaths has declined from 48.3 per 100,000 persons in 1980 to 37.3 per 100,000 persons in 1998. Although this is encouraging, injuries continue to take a terrible toll in terms of death, personal suffering and economic cost. During 1996-1998 in Utah, unintentional injuries resulted in 1,892 deaths, 29,833 hospitalizations and almost 509,000 emergency room visits.[3,4,5]

The Violence and Injury Prevention Program works with community partners to reduce unintentional injury in the following high priority areas:

- Motor Vehicle Crash Injury
- Pedestrian Injury
- Bicycle/Pedal Cycle Injury
- Fall Related Injury

Intentional Injury

Intentional injury or "violence" refers to harm that is deliberately and intentionally inflicted by a person or persons. The harm may be directed toward another person (as in the case of assault or legal intervention) or the injury may be self-inflicted (as in suicide or attempted suicide).

Intentional injury or violence is a major public health problem. Not only is it a direct cause of physical injury, but it results in great emotional harm for the victim as well as the victim's family, friends, and loved ones.

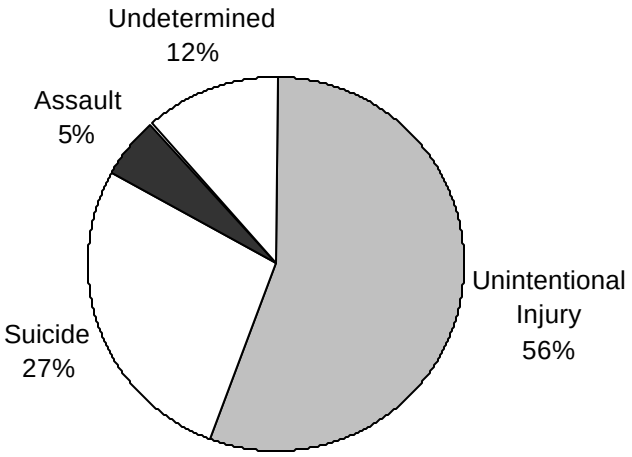
During 1997, Utah's population increased 3.9% while violent crime increased 5.3% and domestic violence accounted for 40% of all assaults.[6] Rape and sexual assault are a growing problems in Utah. It is estimated that only 16% of rape cases are reported.[7] Utah's suicide rates have been consistently higher than the national rate since 1979. Suicide is the leading cause of death for Utah males 15-44 years of age resulting in 492 deaths during 1996-1998, causing more deaths in this age group than motor vehicle crashes (411), cancer (197), or heart disease.[3]

The Violence and Injury Prevention Program works to reduce violence and intentional injuries in the following high priority areas:

- Rape and Sexual Assault
- Intimate Partner Abuse
- Suicide

Figure 1:

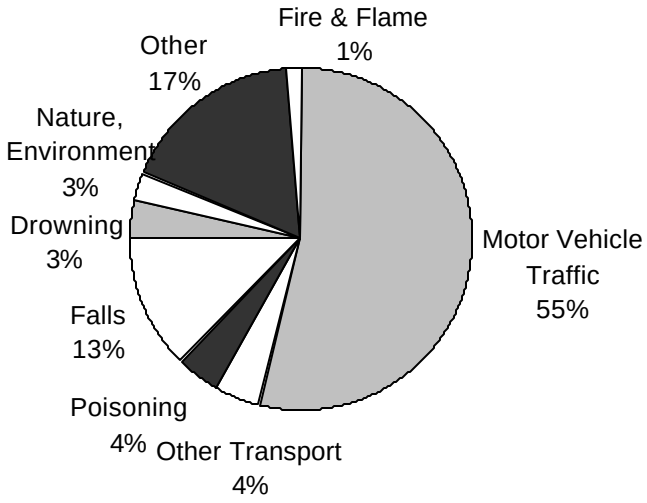
Intentional and Unintentional Injury Death in Utah, 1996-1998



Total Intentional and Unintentional Injury Deaths=3,399
Office of Vital Records and Statistics, Utah Department of Health, 1996-1998

Figure 2:

Unintentional Injury Death in Utah, 1996-1998



Total injury deaths = 1,892
Office of Vital Records and Statistics, Utah Department of Health, 1996-1998

Motor Vehicle Crash Injury

Definition: Motor Vehicle Traffic Crash: Any motor vehicle traffic crash occurring on a public highway. Motor Vehicle Non-Traffic Crash: Any motor vehicle traffic crash that occurs entirely in any place other than a public highway.

National and CFHS Objectives:
By 2010, reduce deaths caused by motor vehicle crashes to 9 deaths per 100,000 population.
U.S. baseline: 16.2/100,000 in 1998
Utah baseline: 20.1/100,00 in 1998

By 2010, increase use of safety belts to 92 percent of the total population.
Utah baseline: 67% in 1999

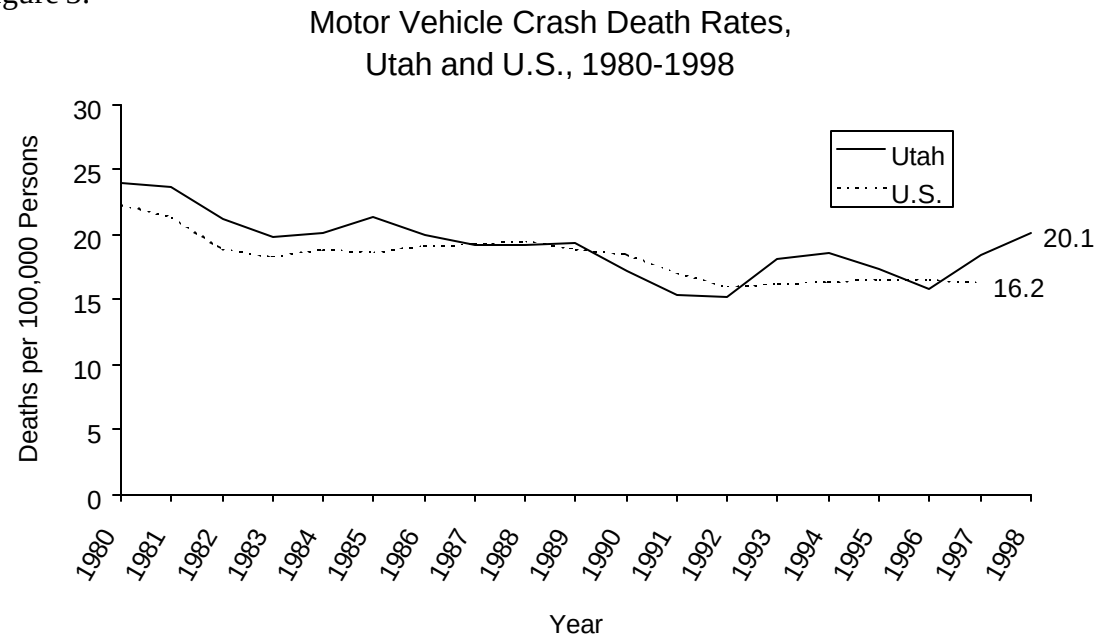
How are we doing? Motor vehicle death rates have declined for several years, but have risen again in recent years. During 1996-1998 in Utah, motor vehicle traffic crashes resulted in 1,027 deaths, 5,387 hospitalizations, and more than 66,000 emergency room visits among Utah residents.[3,4,5]

How does Utah compare to the U.S.? From 1980 to 1992, Utah's death rate for motor vehicle crashes declined to below the overall U.S. rate. However, from 1992 to 1998 Utah's motor vehicle death rate increased and was higher than the national rate.

Why is it important? Motor vehicle crash injury is the leading cause of death among children, teens, and young adults. Among Utah children ages 0-19 years, motor vehicle traffic crashes resulted in 280 deaths, 1,578 hospitalizations, and more than 23,000 emergency room visits during 1996-1998.[5] In 1998 alone, inpatient hospital charges for motor vehicle traffic injuries among all ages amounted to over $30 million.[4] These numbers do not include the cost of visits to emergency rooms, clinics and doctor's offices or the cost of lost wages and lost productivity.

What are the risk factors? Although motor vehicle crashes are a major cause of injury for all ages, children are at particular risk for death and injury from motor vehicle occupant crashes. The greatest risk factor for children being killed or injured from a motor vehicle occupant crash is riding unrestrained or improperly restrained. In an observational survey conducted in 1999, restraint usage among children under two years of age was 93.7%, but only 63.7% of children two to ten years of age were restrained in a child seat or seat belt.[8] It is estimated that nearly 80% of children who are placed in car safety seats are improperly restrained.[9] There is a great need to increase booster seat use among children 4 to 8 years of age. Children of this age group are especially vulnerable. Most have outgrown their child safety seats but are still not large enough for adult safety belts. Parents need to understand the importance of using booster seats to protect their children. All local health departments

Figure 3:

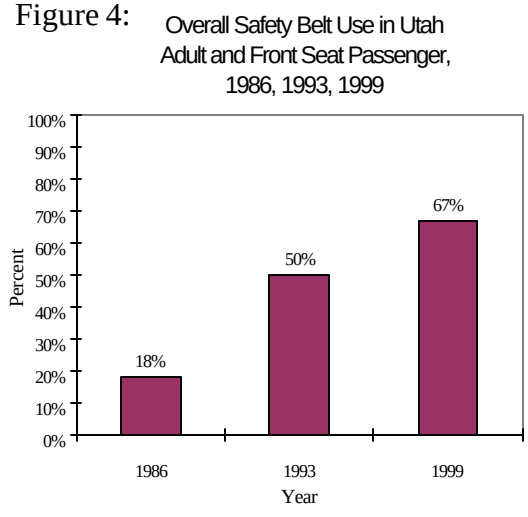


Note: Age adjusted to U.S. 2000 population, ICD-9 codes E810-E825
Sources: Population Data-Utah Governor's Office of Planning and Budget; Utah death data-UDOH, Office of Vital Records and Statistics; U.S. data-CDC Wonder

are currently working with VIPP to develop a statewide campaign to promote booster seat use for children 4-8 years of age.

What are we doing? The Violence and Injury Prevention Program is working with several agencies and community partners to promote the use of safety belts, child safety seats, and booster seats. VIPP has assisted the Traffic Safety Force in educating the public about graduated driver's licensing for youthful drivers and primary enforcement of seat belt laws. VIPP is currently working with high school driver's education programs to increase pedestrian safety training for young drivers. As the lead agency for the Utah SAFE KIDS Coalition, VIPP works with many state and local partners to promote child restraint use and conduct car seat safety inspections.

Figure 4:



Utah Safety Belt Observational Survey. Utah Highway Safety Office, March 2000.

Pedestrian Injury

National and CFHS Objective: By 2010, reduce pedestrian deaths on public roads to 1 pedestrian death per 100,000 population.
U.S. baseline: 2 /100,000, 1997
Utah baseline: 2.4/100,000, 1998

Definition: A pedestrian is any person on foot or in a wheelchair.

How are we doing? Although rates are declining, each year in Utah about 50 people die from pedestrian injuries. During 1996-1998 in Utah, 143 people died from pedestrian related injuries. Eighty-three percent (119) were motor vehicle traffic related. In addition, there were 630 hospitalizations and 2,930 visits to hospital emergency rooms.[3,4,5]

How does Utah compare to the U.S.? In 1998, Utah reported 2.4 per 100,000 pedestrian deaths on public roads, which was slightly higher than the national rate in 1997 of 2.0 per 100,000.[3,10]

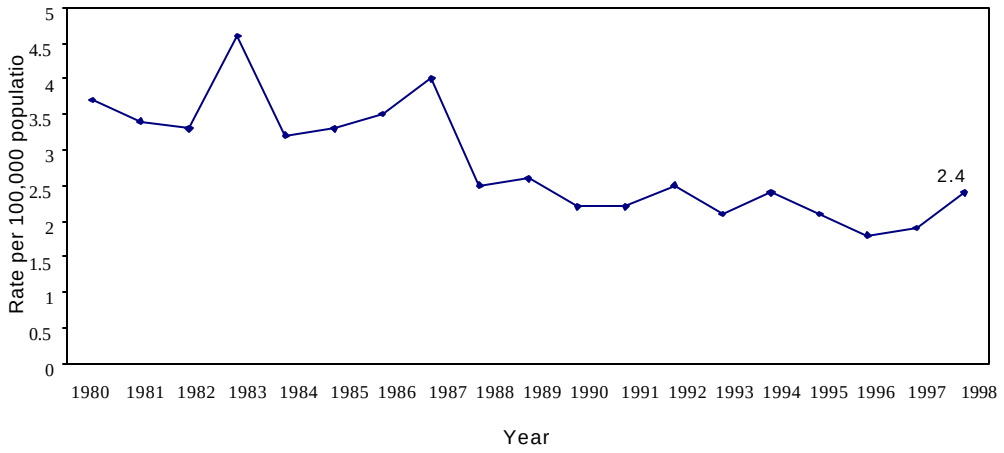
Why is it important? In Utah, motor vehicle pedestrian deaths accounted for about 10% of all motor vehicle traffic deaths during 1996-1998, and the hospital inpatient charges exceeded $8 million.[3,4] In the Utah and the U.S., the rate of pedestrian injuries has been declining. Factors contributing to this decrease may include more and better sidewalks, pedestrian paths, playgrounds away from streets, and restricted on-street parking.[11] In order to continue the downward trend in pedestrian deaths, building upon these and other successful measures is essential. It is also necessary to promote safe walking and to create a pedestrian friendly environment through education, enforcement, and engineering.

What are the risk factors?
Age – For 1996-1998, the rate of non-traffic pedestrian deaths was highest among children under the age of 5 (1.2 per 100,000 children), while the rate of motor vehicle traffic pedestrian deaths was highest among people age 65 and older (3.8 per 100,000 persons).
Gender – The rates for pedestrian deaths, hospitalizations, and emergency room visits are higher for males than females.[3,4,5]

Other factors that contribute to pedestrian injuries include:
- ✓ Lack of education about safety rules and laws
- ✓ Increase in number of motor vehicles and roads
- ✓ Unfriendly pedestrian environment
- ✓ Lack of visibility of pedestrian
- ✓ Alcohol use by the driver or pedestrian
- ✓ Inadequate adult supervision of children
- ✓ Overestimating children's street-crossing ability

Different age groups tend to experience different events leading to a pedestrian

Figure 5: Motor Vehicle Pedestrian Death Rates in Utah, 1980 - 1998*



*Age adjusted rate per 100,000 persons
Utah Death Certificate Data, 1980-1998, Utah Department of Health

injury. Toddlers are often injured in driveways. Preschoolers' injuries typically occur when darting out between two parked cars on a residential street. Injuries among children ages 6-12 years mainly occur from collisions with a car in the middle of the block and on busy streets. Adult injuries often occur as a result of "jay-walking" and many involve alcohol use.

What are we doing? The Violence and Injury Prevention Program works to reduce pedestrian injuries by participating with community partners in a variety of prevention activities, which include:

- ✓ Walk Your Child to School Day
- ✓ Green Ribbon Month
- ✓ Media interviews
- ✓ Pedestrian safety training in high school driver education programs
- ✓ Supporting pedestrian friendly legislation
- ✓ Providing workshops, presentations, and technical assistance
- ✓ Participation in Legislative Traffic and Pedestrian Safety Council

Contextual information: Measures that can help reduce the incidence and severity of pedestrian injuries include: ***Education:*** Education for all road users including drivers and pedestrians, especially youthful drivers, young children, and parents of young children. ***Enforcement:*** Effective enforcement includes citing pedestrians and motorists who violate traffic laws, especially speeding in school zones, neighborhoods, and shopping areas and adult jaywalking in busy civic centers. ***Environment:*** Appropriate lighting, signing, striping, sidewalks, and intersection design can all be used to reduce the dangers to pedestrians. Other measures include increasing the installation of sidewalks in suburban and rural areas, adult supervision of children near streets, lower speed limits on streets with heavy pedestrian traffic, and barriers between pedestrians and motor vehicles (pedestrian bridges, overpasses, underpasses, and pedestrian malls).♦

Bicycle and Pedal Cycle Injury

Definition: Pedal cyclists are riders of bicycles and tricycles. A pedal cycle is any road transport vehicle operated solely by pedals including bicycle, pedal cycle, tricycle. It excludes motorized bicycles.

National Objective: By 2010, increase the use of helmets by bicyclists.

CFHS Objective: By 2010, increase bicycle helmet use among children 5-12 years of age to 50%.
Utah baseline: 15.6% in 1999

How are we doing? During 1996-1998 in Utah, twenty people died due to bicycle/pedal cycle related injuries. In addition, there were 621 hospitalizations and almost 13,000 emergency room visits. Fifty percent of these deaths were among children ages 5-14 years. Children 5-14 years old also accounted for 43% of hospitalizations and 52% of emergency room visits.[3,4,5]

How does Utah compare to the U.S.? In 1997, Utah's pedal cycle death rate of 0.2 per 100,000 was a little lower than the U.S. rate of 0.26 per 100,000.[3,12] According to the 1997 BRFSS survey, Utah ranked 46th in the nation in the percentage of children who were reported to have always used bicycle helmets.[13] Nationwide an estimated 25% of children age 5-14 years wear bike helmets when riding their bicycles.[14] In Utah, 15.6% of children age 5-12 years wear helmets.[15]

Why is it important? Bicycles are associated with more childhood injuries than any other consumer product except the automobile.[16] In Utah, 86% of bicycle related deaths involve a motor vehicle crash, and the most common cause of death is traumatic brain injury.[17]

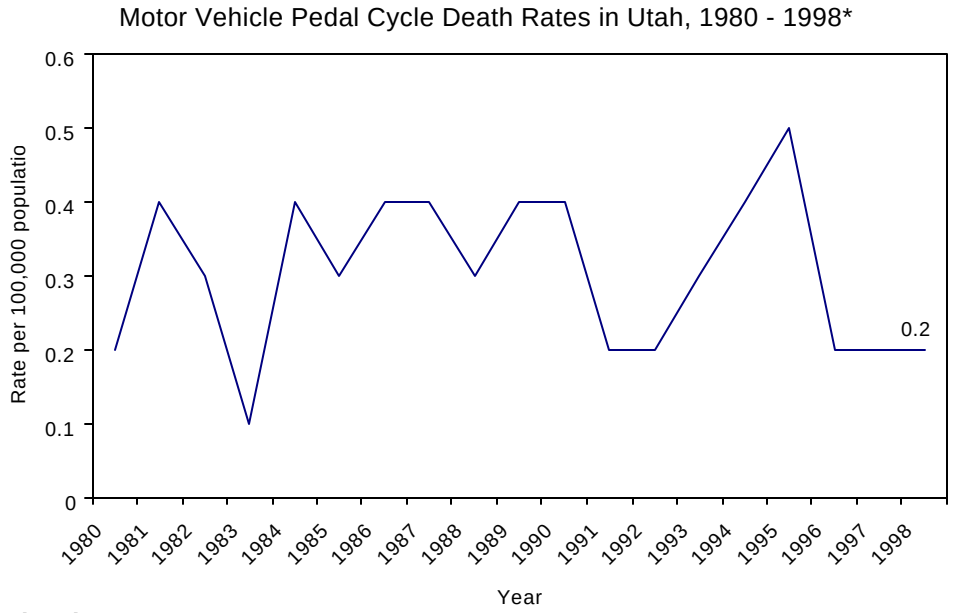
What are the risk factors?

- ✓ Age – Most pedal cycle deaths, hospitalizations and emergency room visits occur among children under 19 years of age.[3,4,5]
- ✓ Gender – Approximately seventy-five percent of pedal cycle deaths occurred among males.[3]
- ✓ Helmet use/non-use – It is estimated that bicycle helmet use reduces the risk of head injury by 85% and brain injury by 90%.[18]

What are we doing? The Violence and Injury Prevention Program works with state and local partners to increase the use of bike helmets among elementary school age children in Utah. Activities include:

- ✓ Purchasing and distributing low-cost bike helmets
- ✓ Conducting bike rodeos
- ✓ Conducting bicycle safety education for elementary school children and parents
- ✓ Participating with SAFE KIDS coalition partners to promote bike

Figure 6:



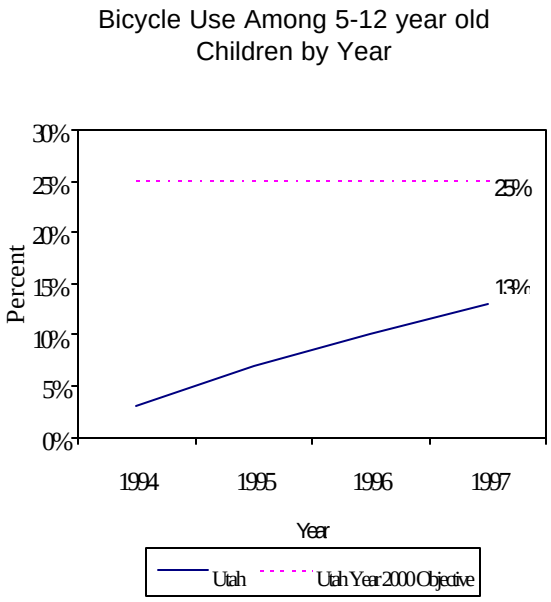
*Age adjusted rates
Source: Utah Death Certificate Data 1980-1998, Utah Department of Health

helmet use during the annual SAFE KIDS week and Gear-Up Games

- ✓ Working with PTAs and schools to establish school policies that will increase student bicycle helmet use
- ✓ Conducting an annual statewide bicycle helmet observation survey to monitor bicycle helmet use rates

Contextual information: Proper use of bicycle safety helmets is the single most effective measure for preventing bicycle related brain injuries and deaths, but most Utah children age 5-12 years, don't wear helmets (7.6% in 1995 increasing to 15.6% in 1999).[15] States with mandatory helmet use have significantly higher usage rates than states without such laws. Utah is one of 35 states that does not have any type of bicycle helmet law. In the absence of such a state law, there is a greater need to encourage schools, local communities, and organizations to establish policies and regulations that require helmet use.♦

Figure 7:



Source: Utah Bicycle Helmet Observation Survey

Fall-Related Injury

Definition: An unintentional fall is a trip, slip, stumble or a fall on a level plane, from one level to another or into a hole or other opening.

National Objective: By 2010, reduce deaths from falls to 2.3 deaths per 100,000 population.
U.S. baseline: 4.5 deaths per 100,00 population in 1998

CFHS Objectives: By 2001, reduce deaths due to falls among people 65 years of age and older to 25 per 100,000.
Utah baseline: 36.6 per 100,000 in 1998.

By 2001, reduce hospitalizations due to falls among people 65 years of age and older to 100 per 100,000.
Utah baseline: 158.3 per 100,000 in 1996-1998.

How are we doing? Falls are the most common cause of injury hospitalization and the third leading cause of injury death in Utah. Since 1980, the rate of deaths from falls has declined slightly from 6.8 per 100,000 to 5.3 in 1997. Nevertheless, each year in Utah, falls still account for approximately 81 deaths, 4,000 hospitalizations, and 42,900 emergency room visits.[3,4,5]

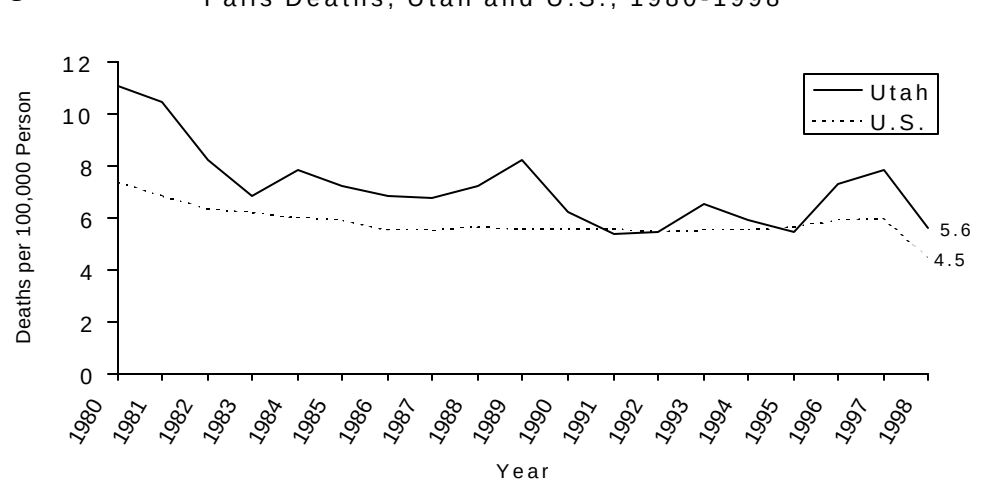
How does Utah compare to the U.S.? During 1995-1997, Utah ranked 16th highest in the nation for deaths from falls (4.95 per 100,000 population). Wisconsin was highest with a rate of 8.37 and Maryland was lowest with a rate of 2.64 per 100,000. In 1998, Utah's rate was 6.1 while the U.S. rate was 4.5 per 100,000 population.[3,19]

Why is it important? During 1996-1998, there were 244 deaths and nearly 12,000 fall-related hospitalizations among Utah residents. Approximately 70% of these deaths and hospitalizations were among people ages 65 and older. Among Utah children ages 0-19 years, there were 15 fall-related deaths during 1996-1998, 1,512 hospitalizations, and nearly 63,000 emergency room visits. Nearly half of all fall-related emergency room visits were by children ages 0-19 years.[3,4,5] According to student injury reports from Utah's public schools, during 1990-1998 there were 6,937 fall-related injuries among children in grades K-6 that required medical attention or resulted in the loss of half a day or more of school.[20]

What are the risk factors? Factors that contribute to the incidence or severity of fall-related injury include:

- ✓ Age – Rates for fall-related deaths and hospitalizations are highest among people ages 65 and older, while rates for emergency room visits are highest among children under the age of five.
- ✓ Gender – The rate of deaths from falls is higher for males, while the rate of hospitalization is higher among females.
- ✓ Environmental Hazards – Slippery floors, broken stairs, loose rugs, lack

Figure 8:



Note: Age adjusted to U.S. 2000 population, ICD-9 codes E 880-E888
Sources: Population Data-Utah Governor's Office of Planning and Budget; Utah death data-UDOH, Office of Vital Records and Statistics; U.S. data-CDC Wonder

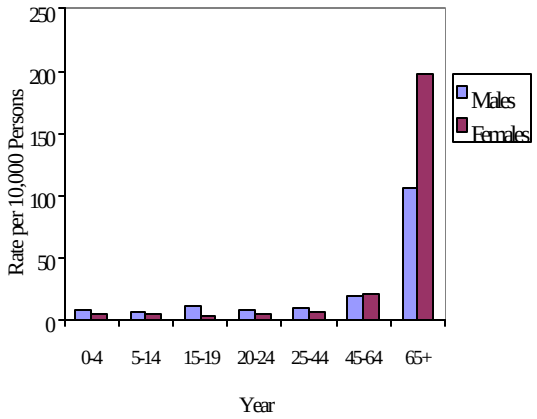
of stairway handrails, poor lighting, floor mats, and clutter.

- ✓ Physical Health – Fragile health due to illness, poor diet, or lack of exercise, impairment due to use of medications or alcohol, impaired vision.
- ✓ Mental Health – Psychological factors such as dementia, Alzheimer's disease, and depression.

What are we doing? VIPP contracts with local health departments to conduct home safety and fall prevention programs for seniors. Local health departments and the State Office of Risk Management conduct school playground safety inspections and work with schools to make playgrounds safer and thus reduce fall injuries that occur at school. VIPP and the Utah SAFE KIDS coalition conduct public education related to child home safety including fall prevention through community events, media interviews, and the SAFE KIDS newsletter. Measures that can help prevent falls or reduce the severity of injury include:

- ✓ Exercise – Regular exercise contributes to musculo-skeletal strength and improved balance.
- ✓ Home Safety – Grab bars in bathrooms; non-skid mats in tubs and showers; handrails on both sides of stairs; adequate lighting in all rooms and hallways.
- ✓ Vision – Vision should be checked and prescribed glasses or lenses worn. ♦

Figure 9:



Source: Utah Hospital Inpatient Discharge Database, 1996-1998, Utah Department of Health

Rape and Sexual Assault

Definition: Rape: Sexual intercourse without consent and chiefly by force.
Sexual Assault: Any unwanted sexual contact or attention achieved by force, threats, bribes, manipulation, pressure or violence.

National Objective: By 2010, reduce rape and attempted rape to 0.7 per 1,000 population.
U.S. baseline: 0.9 per 1,000 in 1998.

CFHS Objective: By 2010, reduce rape and attempted rape among women age 12 and older to 70 per 100,000 women age 12 and older.
Utah baseline: 96 per 100,000 in 1998.

How are we doing? In Utah, it is estimated that a rape occurs once every 11 hours. The incidence of rape has nearly doubled during the past decade from 478 in 1989 to 796 in 1998.[6] The Federal Bureau of Investigation has estimated that only 16 percent of rapes are reported to law enforcement. Based on that estimate, over 6,000 forcible rapes will occur in Utah during 2001.[7]

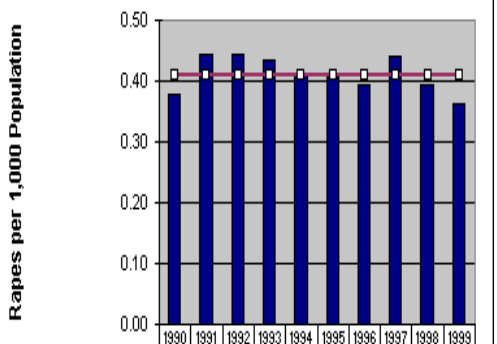
How does Utah compare with the U.S.? According to Uniform Crime Report data on forcible rape, Utah's rape rate has been higher than the U.S. rate during the past decade. During 1994-1998, the U.S. rate declined from 39.3 to 34.4 per 100,000 population while Utah's rate has declined slightly from 42.2 to 41.7 per 100,000 population. Utah's rate is the 14th highest in the nation – higher than the rates of New York, Washington D.C., and California.[7]

Why is it important? Rape is a crime of violence. Sexual violence impacts everyone – women, children, and men of all ages, race, and backgrounds. It devastates families and destroys lives.

Victims of rape often manifest long-term symptoms of chronic headaches, fatigue, sleep disturbance, recurrent nausea, decreased appetite, eating disorders, menstrual pain, sexual dysfunction and suicide attempts.[21] In one longitudinal study, sexual assault was found to increase the odds of substance abuse by a factor of 2.5.[22] Victims of marital or date rape are 11 times more likely to be clinically depressed, and six times more likely to experience social phobia than are non-victims. Psychological problems are still evident in cases as long as 15 years after the assault.[23] Many of these symptoms have a major effect on health care costs and community resources as well as the ability to maintain employment. Non-genital physical injuries occur in about 40% of completed rapes.[24] The National Institute of Justice reports that approximately 259,000 rape incidents were recorded nationwide in 1993. The estimated cost was about $23 billion.[25]

What are the risk factors? Results of a National Crime Victimization Survey indicated that 92% of rapes were committed by assailants known to the victim, approximately half were committed by friends and acquaintances, and 26% were committed by intimate

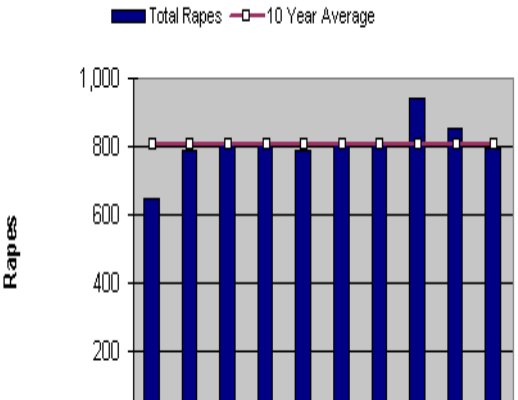
Figure 10: Rapes per 1,000 and 10 Year Average



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Rapes per 1,000 Population	0.38	0.45	0.44	0.44	0.41	0.41	0.39	0.44	0.39	0.36
10 Year Average per 1,000	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41

Source: Bureau of Criminal Identification. 1999

Figure 11: Rapes per Year and 10 Year Average



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total Rapes	649	788	806	806	786	803	810	939	852	796
10 Year Average	804	804	804	804	804	804	804	804	804	804

Source: Bureau of Criminal Identification. 1999

partners.[26] Victims of rape and sexual assault include males and females of all ages. However, adolescent and young adult women are the most frequent victims.

Risk factors for perpetrating sexual violence include:

- ✓ Early sexual experience (both forced and voluntary)
- ✓ Adherence by men to sex role stereotyping
- ✓ Negative attitudes of men toward women
- ✓ Alcohol consumption
- ✓ Acceptance of rape myths by men[21]

What are we doing? The Violence and Injury Prevention Program provides partial funding to ten rape crisis programs for confidential crisis services, information, and support services for victims of rape and sexual assault. VIPP also provides funding for a statewide toll free 24-hour rape and sexual assault crisis and information line (1-888-421-1100). This number connects the person calling with the nearest rape crisis program. Hospital intervention teams provide services to reporting victims at medical/health care settings and during the collection of evidence. Ten rape crisis centers in Utah provide educational and informational public awareness presentations to increase sensitivity within communities regarding the cause and impact of sexual violence and promote prevention/risk reduction skill building. Annual public awareness campaigns are developed to increase the understanding and effects of sexual violence and promote community understanding of the issue. VIPP provides partial funding to the Utah Coalition Against Sexual Assault to conduct standardized training for rape crisis advocates who work with survivors of rape and sexual assault.♦

Intimate Partner Abuse

Definition: A systematic pattern of coercive behaviors which may include battering, psychological abuse, sexual assault, isolation, deprivation, and intimidation perpetrated by a past or present intimate partner.

National Objective: By 2010, reduce rate of physical assault by current or former intimate partner to 3.6 per 1,000 persons age 12 years and older.

CFHS Objective: By 2010, reduce physical assault by intimate partners to no more than 300 per 100,000 persons age 12 and older.
Utah baseline: 350.8 per 100,000 in 1999.

How are we doing? Each year, an estimated 40,000 Utah women are physically assaulted by an intimate partner and 194,000 women are subjected to emotional abuse.[27] On average, 11 Utah women die each year from intimate partner violence.[28]

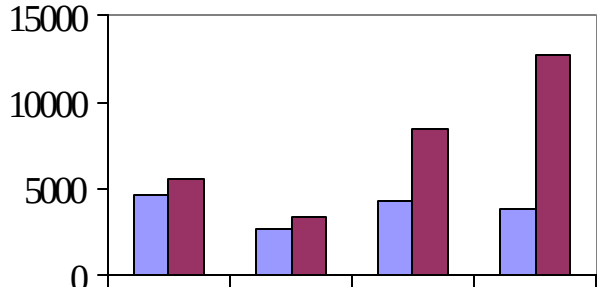
How does Utah compare with the U.S.? During 1996 in the U.S., current or former intimate partners perpetrated 30% of all female murders.[7] During 1994 to 1999 in Utah, 49.6% of deaths among women age 15 and older were due to violence by their current or former intimate partner.[29]

Why is it important? Intimate partner abuse is a serious public health problem affecting women, children, families and the community. According to the National Violence Against Women Survey, violence against women is primarily due to intimate partner violence. In the U.S., a current or former husband, cohabiting partner, or date assaulted 76% of women who were raped and/or physically assaulted since age 18. Approximately 1.5 million women are raped and/or physically assaulted by an intimate partner annually in the U.S.[30] In a study of emergency department visits by women, over half of all women in the study had experienced intimate partner violence at some time in their lives.[31] Non-lethal intimate partner violence results in financial losses to female victims that are estimated to be $150 million per year. Medical expenses account for at least 40% of these costs, property losses for another 44%, and lost wages for the remainder.[32] Every year domestic violence results in almost 100,000 days of hospitalizations, almost 30,000 emergency department visits and almost 40,000 visits to a physician.[33]

What are the risk factors?

- ✓ Age and gender: Women age 19 to 29 are more likely to be victims of violence by an intimate partner
- ✓ Income: Women in families with incomes below $10,000 are more likely to be victims of violence by an intimate partner
- ✓ Alcohol and substance abuse by the victim or perpetrator
- ✓ History of family violence:

Figure 12: Domestic Violence Shelter Services FY 1996-1999



	1996	1997	1998	1999
Clients Sheltered	4614	2652	4242	3774
Clients Served, Not Sheltered	5545	3325	8484	12736

Source: Utah State Domestic Violence Cabinet Council, 1999. Domestic Violence. 1999 Annual Report.

Includes being a victim of child abuse as well as witnessing abuse of a parent or family member.[34]

What are we doing? Counseling and shelter services for victims are provided through various agencies. VIPP conducts education and training of health care providers to improve identification, treatment and referral of patients affected by partner abuse. Improvements are being made in Utah's data collection. VIPP is creating an Intimate Partner Violence Death Review Team (IPVDRT). The IPVDRT will be a multi-disciplinary team that will review all female homicides perpetrated by an intimate partner during the period 1994-1999. Members of the team will come from domestic violence, health, law enforcement, legal, social, and medical arenas. The team will perform an in-depth review of each indicated homicide. An epidemiological model will be used to identify risk factors and suggest possible prevention measures.

Contextual and related information:

- ✓ In Utah, 1 in 5 children witness or hear verbal abuse and 1 in 14 children witness or hear physical abuse.[35]
- ✓ Each year more than ten million American children witness IPV within their families.
- ✓ Witnessing family violence is stressful to children and is a risk factor for long-term physical and mental health problems.[36] ♦

Suicide

Definition: Death due to intentional self-inflicted injury.

National Objective: By 2010, reduce suicide deaths to 6.0 per 100,000 population.

CFHS Objective: By 2010, reduce suicide deaths among adolescents 15-19 years of age to 10 per 100,000.
Utah baseline: 21.1 per 100,000 in 1997.

How are we doing? Suicide is the second leading cause of injury death in Utah, accounting for almost as many deaths as motor vehicle crashes. In 1998, 335 people died from sucide in Utah. Since 1980, suicide rates have decreased for Utah females (9.3 to 6.1 per 100,000); but rates have increased for males (24.1 to 29.6 per 100,000).[3]

How does Utah compare to the U.S.? For nearly two decades, Utah's suicide death rate has been higher than the U.S. rate. In 1997, the rate of suicide deaths in Utah was 15.6 per 100,000 persons compared to the U.S. rate of 11.4 per 100,000. Utah's suicide rate for young males is one of the highest in the nation.[3,37]

Why is it important? Suicide is the leading cause of death for Utah males 15-44 years of age resulting in 208 deaths during 1996-1998. Suicide causes more deaths in this age group than motor vehicle crashes (196), cancer (123), or heart disease (98).[3] In 1999, the U.S. Surgeon General, David Satcher, issued *A Call to Action to Prevent Suicide*, stating that suicide is a major public health problem.[38] Suicide causes devastating personal and emotional suffering for the victim's friends and family, as well as serious social and economic consequences for the community.

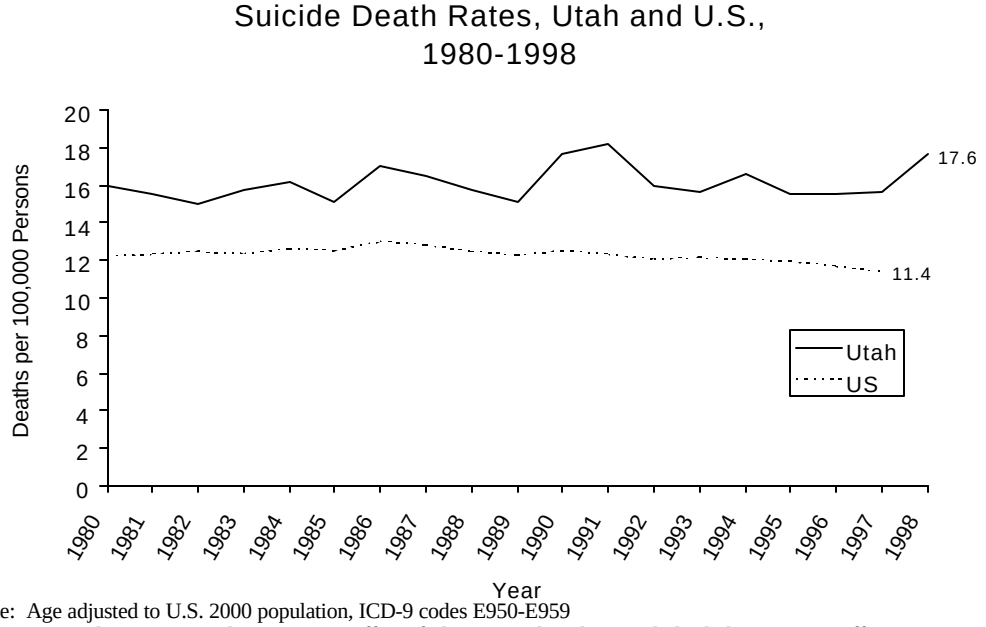
What are the risk factors? Many conditions, symptoms, traits and stressors have been investigated, but no single factor or set of factors can accurately predict suicide. However, some common risk factors have been identified:

- ✓ History of past attempt
- ✓ Current suicidal ideation
- ✓ Depression
- ✓ Recent attempted or completed suicide by a friend or family member
- ✓ Low self-esteem

During 1997-1999, the Violence and Injury Prevention Program and the University of Utah conducted the Utah Youth Suicide Study.[39] Preliminary results identified the following risk factors for youth in Utah:

- ✓ Gender and age (among Utah teenagers, males age 15-19 have the highest suicide rate)
- ✓ Availability of firearms
- ✓ Involvement with the Juvenile Justice system
- ✓ Involvement with the Division of Child and Family Services (DCFS)

Figure 13:



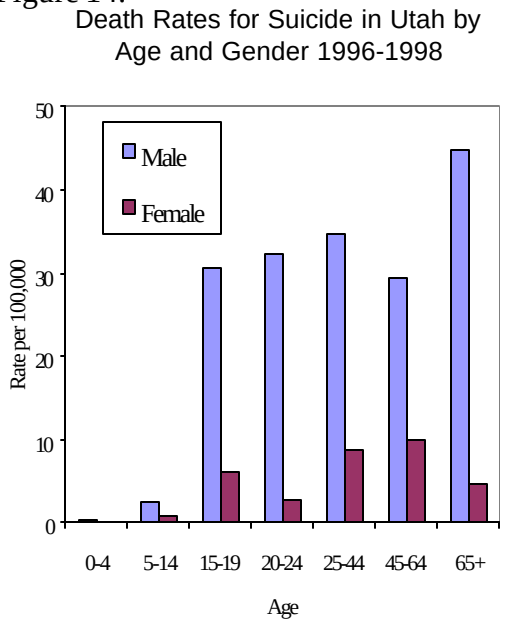
Note: Age adjusted to U.S. 2000 population, ICD-9 codes E950-E959
Sources: Population Data-Utah Governor's Office of Planning and Budget; Utah death data-UDOH, Office of Vital Records and Statistics; U.S. data-CDC Wonder

Co-morbidity (presence of one or more mental and/or physical illnesses)

What are we doing? In 1998, the Utah Legislature passed HCR 6: A Resolution on Teen Suicide Awareness and Suicide Prevention, which called for developing a plan to prevent teenage suicide and help rehabilitate survivors of suicide attempts. In 1999, with the cooperation of several agencies and partners, the VIPP facilitated the formation of the Youth Suicide Task Force, which includes youth experts and advocates from many disciplines. The task force has recommended the following measures for youth suicide prevention and intervention:[40]

1. Improve coordination, collaboration and education around suicide prevention
2. Develop FACT support of suicide prevention as a statewide initiative and conduct a screening and referral pilot project for high-risk youth using FACT teams and LICs for early identification, intervention and referral of youth at risk of suicide
3. Create a public information campaign targeting parents and youth to promote public awareness

Figure 14:



Source: Utah Department of Health, Office of Vital Records and Statistics, Mortality Data, 1996-1998.

that suicide is a preventable public health problem and to reduce the stigma associated with suicide

4. Provide suicide prevention training for professionals who work with or have frequent contact with youth (e.g., educators, counselors, juvenile detention staff, social workers, FACT teams, etc.)
5. Conduct suicide epidemiology to monitor trends, study risk factors, and evaluate effectiveness of prevention activities.♦

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